

Value Engineering Team Study
Summary of Recommendations and Responses

1. Provide spare gates to maintain navigation reliability – Costs \$3,125,000.

Response: Do not concur. Following the District wide Technical Review, the decision was made that both gates did not have to be constructed to the design stage of El. 31.7. We are designing the gates at El. 31.7 and El. 26.8 respectively. Spare gates would require double the effort and double the space to store. Ops Division has agreed that based on the amount of open-pass conditions experienced at Bayou Sorrel spare gates are not as critical as other locations.

2. Designate 110-ft wide Lock as the Recommended Plan – Costs \$6,500,000.

Response: Concur. Data concerning safety and reduction in the risk of a major accident was gathered and analyzed. The benefits gained made the 110-ft wide lock the NED and recommended plan.

3. Eliminate emergency bulkheads – Savings \$4,157,960.

Response: Concur. Bulkheads have been eliminated.

4. Eliminate emergency bulkheads and use existing Leland Bowman emergency bulkheads – Savings \$4,157,960.

Response: Concur. Bulkheads have been eliminated.

5. Specify alternate high density synthetic for lock wall armor – Savings \$3,535,472.

Response: Do not concur. Will use in construction of guide walls. No historical data to back up claims that plastic wall armor is more durable with less maintenance.

6. Reduce guide wall length – Savings \$3,177,600.

Response: Concur. We have reduced the west walls from 800 feet to 400 feet. We will leave the two east walls at 1,200 feet.

7. Eliminate dewatered condition from lock design and use T-wall design with struts – Savings \$2,718,038.

Response: Do not concur. The dewatered case is not the critical design case; therefore, eliminating it would not serve any purpose.

8. Eliminate dewatered condition from lock design – Savings \$1,079,730.

Response: Do not concur.

9. Use a precast post tensioned concrete star pile – Savings \$964,000

Response: Concur. We will investigate the use of larger piling to reduce the total number in the next phase of the study.

10. Use composite piles for chamber foundation – Savings \$600,000.

Response: Do not concur. There is no historic data to back up claim of improved service life.

11. Use modular lock control houses – Savings \$250,000.

Response: Concur. We will investigate in the next phase of the study.

12. Move control house off lock wall, reduce lock wall thickness – Savings \$466,570.

Response: Concur. We will investigate in the next phase of the study.

13. Reduce number of control houses – Savings \$468,750.

Response: Concur. The number has been reduced to two control houses.

14. Use 35-ft diameter guard dolphin for upstream and downstream approach walls – Savings \$193,464.

Response: Concur. We will investigate in the next phase of the study.

15. Reduce lock chamber armor – Savings \$3,179,000.

Response: Do not concur. The amount of armor provided is based on the current applicable EM.